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TYPIFICATIONS AND A NOMENCLATURAL CHANGE IN SOME EASTERN NORTH AMERICAN *OPUNTIA* (CACTACEAE)

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ABSTRACT

Recent advances in our understanding of the evolutionary relationships of eastern North American *Opuntia* closely allied to *Opuntia humifusa*, i.e., the *O. humifusa* complex, have resulted in the necessity for a taxonomic revision of the group. Here I neotypify two species described by Rafinesque for which no type specimens exist, *O. cespitosa* and *O. mesacantha*. I also change the taxonomic status of a species described by J.K. Small, *O. lata*, to subspecific rank, with the new combination **O. mesacantha** subsp. **lata** (Small) Majure **comb. et stat. nov**. *Opuntia macrartha* Gibbes also is neotypified based on material collected by J.K. Small from around the type locality for that taxon, as is *O. atrocapensis*, for which no type has ever been located.

Members of the *Opuntia humifusa* complex, primarily of eastern North America east of the Mississippi River, have been included in numerous treatments (Britton & Rose 1920, 1923; Small 1903, 1913, 1919, 1933; Radford et al. 1968; Benson 1981; Doyle 1990; Pinkava 2003; Wunderlin & Hansen 2011). However, there still are specific taxa within the group that have not been typified (e.g., *O. cespitosa* Raf., *O. mesacantha* Raf.; Rafinesque 1830) or for which the type specimens no longer exist (e.g., *O. macrartha* Gibbes) or have never been found (*O. atrocapensis* Small; see Benson 1982). This group is the subject of a taxonomic revision (Majure et al. in prep.) and has been studied in detail from a phylogenetic as well as morphological and cytogenetic standpoint (Majure & Ervin 2008; Majure & Ribbens 2012; Majure et al. 2012a & b, 2013; Majure et al. in prep.). These recent studies also have provided evidence for the recognition of subspecific taxa of two distinct ploidal levels (diploid and tetraploid; Majure et al. 2012b; Majure et al. in prep.) within the more widespread species, *O. mesacantha*. That nomenclatural change is also provided below.

Opuntia atrocapensis Small, Man. SE. Fl. 905. 1933. **TYPE**: not found. **NEOTYPE** (designated here): **USA. Florida.** Monroe Co.: sand dunes; Middle Cape Sable, 28 Nov 1916, *J.K. Small s.n.* (US!).

Opuntia cespitosa Raf., Bull. Bot. Seringe. 216. 1830. **TYPE**: not designated by the author. **NEOTYPE** (designated here): **USA. Kentucky.** Woodford Co.: Hwy 60 N at jct. of Hwy 62, just N of Versailles, 9 Jun 2008, *L.C. Majure 3275* (neotype: FLAS!; isoneotype: US!). Note: the specific epithet for this taxon is often spelled "*caespitosa*;" Rafinesque (1830), however, first published the name as "*cespitosa*," so that spelling is maintained here. Non *Opuntia caespitosa* Poepp., Reise Chile 356. 1835.

Opuntia mesacantha Raf. Bull. Bot. Seringe. 216. 1830. **TYPE**: not designated by the author. **NEOTYPE** (designated here): **USA. Virginia.** Hampton, 31 May 1878, *J.W. Chickering, Jr. s.n.* (US!).

Opuntia mesacantha subsp. ***lata*** (Small) Majure, **comb. et stat. nov.** *Opuntia lata* Small, Jour. N. Y. Bot. Gard. 1919. **TYPE: USA. Florida.** [Alachua Co.], pine-woods, 12 mi W of Gainesville, 13 Dec 1917, *J.K. Small s.n.* (holotype: NY!).

Opuntia macrartha Gibbes, Proc. Elliott Soc. Nat. Hist. 1: 273. 1859. **TYPE: USA. South Carolina.** within a few miles of Charleston, [1 Sept 1857, presumably collected by Gibbes], no repository cited. Gibbes' collection was housed at, and subsequently disappeared from, the Charleston Museum during the US Civil War (see Benson 1982). **NEOTYPE** (designated here): **USA. South Carolina.** Charleston Co.: Isle of Palms, near Charleston, 14 Feb 1916, *J.K. Small s.n.* (neotype: US!; isoneotypes: NY! US!).

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